

Appl. No. 10/619,286
Amdt. Date April 22, 2004
Response to Office Action dated April 7, 2004

AMENDMENTS TO THE SPECIFICATION

Please replace the existing title with the following title:

Power and Electrical Signal Interface for a Therapeutic Bed

Please replace the Abstract with the following amended abstract:

A direct ~~data~~ electrical signal and power interface is provided to the patient support platform of a therapeutic bed that allows for a complete rotation of the patient support platform in either direction. In one embodiment, ~~a data~~ an electrical signal and/or power cable is housed within a chain-like cable carrier that is disposed within an annular channel attached to the patient support platform. In another embodiment, a flexible ribbon cable is disposed within the annular channel. The cable carrier or ribbon cable is long enough to allow a full 360 degrees of rotation of the patient support platform in either direction from 0 degrees supine flat while maintaining a direct ~~data~~ electrical signal or power connection. To ensure that the electrical signal ~~data~~ and power connection is not articulated beyond its physical limit as a result of manually rotating the bed in the emergency backup mode, a mechanical stop is provided to limit rotation of the patient support platform to about 730 degrees. Sensors are provided to detect activation of the mechanical stop.

Please replace paragraph [0005] with the following amended paragraph:

[0005] One of the problems in the art of prone positioning therapeutic beds is to provide ~~data~~ electrical signal and power connections to the bed for both the power and controller equipment that moves the bed and for the patient monitoring systems on the bed. To allow unrestricted rotation of the bed of WO 99/62454, for example, electrical power has been provided by wire brushes at the interface between the rotating part of the bed and the nonrotating

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part of the bed. However, due to vibration and other abrupt movements, such wire brushes cause problems of electrical intermittence, which can be detrimental to the therapy of the patient. A direct ~~power~~ electrical signal or data carrier would be preferable to eliminate such intermittence, provided that the wired connection is capable of articulation during movement of the rotating part of the bed into the prone position, and provided that a mechanism is provided to prevent excessive rotation in any one direction.